

Final Notes May 26, 1998

## IMPLEMENTATION TEAM MEETING NOTES

May 7, 1998, 9:00 a.m. - 1 p.m.

### NATIONAL MARINE FISHERIES SERVICE PORTLAND, OREGON

#### I. Greetings and Introductions.

The May 7 meeting of the Implementation Team, held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by Brian Brown of NMFS. The agenda for the May 7 meeting and a list of attendees are attached as Enclosures A and B. The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NMFS's Kathy Ceballos at 503/230-5420 or via E-mail at [kathy.ceballos@noaa.gov](mailto:kathy.ceballos@noaa.gov).

#### I. Introductions and Review of Agenda.

Brown welcomed everyone to the meeting, led a round of introductions and a review of the agenda; he also introduced Donna Silverberg, who has been selected as the Regional Forum facilitator and Jacqueline Abel, her assistant.

#### II. Updates.

A. In-Season Management. TMT chair Cindy Henriksen said many at the River Forecast Center believe that 1998 flows are now at their peak – just over 300 Kcfs at McNary and about 130 Kcfs in the Lower Snake River. We are trying to refill the storage reservoirs -- Libby, Hungry Horse and Dworshak -- as much as possible during the high flow period, she said; there is still some release coming from Grand Coulee for flood control, in order to meet that project's May 31 upper rule curve limit of 1283 feet.

Moving onto the status of the 1998 Water Management Plan, Henriksen said the most recent version (dated March 31) is now available via the TMT's Internet homepage. The document includes placeholder language for changes which may be necessitated by the 1998 supplemental Biological Opinion. In essence, we've been in something of a holding pattern in terms of finalizing this document while we wait for the supplemental BiOp, Henriksen said; at this time, there are no Water Management Plan issues to raise to the IT.

In response to a question from Michele DeHart, Henriksen said that, for planning purposes, the Corps and Bureau are saying, at this time, that Grand Coulee's end-of-May elevation will not exceed 1283.3 feet. However, she said, we will be watching the forecasts very closely between now and the end of the month; if we find ourselves in an extended dry period, rather than a wet, rainy period, at that time, then we'll be talking to the Bureau to see if it may be possible to raise

the 1283-foot ceiling somewhat and store more water at that project. Jim Fodrea added that current Grand Coulee elevation is about 1281 feet. We have been discussing this at the TMT, said Jim Ruff; there is general agreement that, in a low-runoff year like this one, we need to do everything possible to ensure refill of the storage projects by June 30.

DeHart provided a brief overview of the status of the migration, saying that there is nothing really unusual to report – the numbers of wild spring chinook arriving at Lower Granite has been higher, earlier, than usual, and that component of the migration does not appear to have peaked yet – daily passage indices are continuing to rise.

Jim Nielsen of WDFW noted that stranding of fall chinook subyearlings below Grand Coulee Dam appears to be a particular problem this year, based on results from WDFW's ongoing study of Hanford Reach stranding. As many as 50,000 subyearling fall chinook have been stranded below the project so far in 1998, compared to an estimated 1,500 for all of 1997; the reason is increased power peaking at Grand Coulee, Nielsen said. Based on preliminary data, WDFW estimates that up to 30% of the stranded fish are dying, from predation, thermal shock and physical dewatering. My purpose today is to make the IT aware of this issue, Nielsen added.

B. Plan for Analyzing and Testing Hypotheses (PATH). PATH coordinator Dave Marmorek distributed Enclosure C, a memo outlining PATH's proposed approach to assigning weights to the alternative hypotheses explored in PATH's preliminary decision analysis. As most of you will recall, Marmorek said, in February, the IT instructed PATH to concentrate its efforts on fall chinook analysis, and to develop this weight of evidence process. Working with the PATH Planning group, the PATH Scientific Review Panel, Chip McConnaha and Robin Gregory (an expert on decision analysis and elicitation of expert judgement), ESSA has now developed a proposed process for assigning weights to the various alternative hypotheses, Marmorek said. This proposal is outlined in Enclosure C, please see this document for details.

Marmorek spent a few minutes going through this document. He explained that implementation of the weight of evidence process will require some additional work for the Scientific Review Panel and an outside expert in decision analysis; this will result in an additional cost of \$40,700 in FY'98. We believe that it should be possible to provide these funds through a reallocation of existing funds in other fish and wildlife program projects, including other PATH contracts, Marmorek said. PATH would like the Implementation Team to indicate their support for BPA to apply to CBFWA and the Power Planning Council to reallocate the \$40,700 from available funds to allow the weight of evidence process to proceed this year, he continued. BPA's Jim Geiselman has requested a brief letter from the IT to this effect, to expedite approval of this reallocation of funds.

After some minutes of discussion, Brown asked whether any of the other IT members objected to PATH's request; no objections were raised, and various IT participants, including Ron Boyce and Fred Olney, expressed their support. I will draft a letter to BPA and the Council expressing the Implementation Team's support for this additional expenditure, Brown said.

The discussion turned to the schedule for PATH's upcoming work; Marmorek said there has been some interest within the PATH planning group in revisiting the subject of PATH's near-term priorities. I think it's fair to say that, given the tight timeline for fall chinook, it will not be

possible for PATH to complete as detailed an analysis for that stock as we did for spring/summer chinook; it would probably be useful to set aside a few minutes on next month's IT agenda for some further discussion of PATH schedule and priorities, Marmorek said.

C. Integrated Scientific Advisory Board (ISAB). We have been working since January through the SCT process to brief the ISAB on several of the issues that were raised in the SCT's review of the Corps' Capital Construction Program, said Jim Ruff. We have had two technical briefings with the ISAB, covering surface bypass, in particular at Lower Granite, John Day extended-length screens implementation and Bonneville Dam bypass improvements, he explained. The ISAB have been reviewing all of that information and are now preparing a report, scheduled for presentation to the Power Planning Council on May 19. That draft report will cover implementation of the John Day E-screens and the bypass improvements at Bonneville, Ruff explained; it will also discuss how bypass improvements in general fit into an ecosystem context. We're expecting an oral briefing at the Council meeting, and will release the written report for public review following the meeting

Also on the agenda for the May Council meeting, Ruff continued, the Council staff has prepared an issue paper concerning independent technical review of the Corps' engineering processes. Ruff described this report as a value-engineering independent technical review, exploring possible cost savings mechanisms and project efficiencies; we will release that for public comment following the Council meeting as well, Ruff said. He added that both reports will be available via the Council's Internet homepage on May 19. The Council hopes to forward the ISAB report, along with whatever written comments are received, to Congress by June 30.

Ruff said the other items assigned by the IT for ISAB review – the dissolved gas abatement program and the surface bypass program – will be completed by the end of the summer. The ISAB review of adult fish passage facilities and the integration of all of these projects are expected to be completed by the end of 1998. This report is just Phase I, he said – the other two phases are in the pipeline.

The discussion turned to the relatively high rate of descaling that has been observed during 1998 testing of the John Day extended-length screens; one meeting participant asked whether this information will be factored into the ISAB report. It's probably too late to include it in the report itself, Ruff replied, but the Council will get that information as soon as it's available, and will take it into account when they decide what to send back to Congress. My understanding is that they were only seeing the high descaling rate for a period of time at the smolt monitoring facility; the descaling rate has since gone down, said Doug Arndt of the Corps. The point is, it may not be the ESBS system that's causing this, Arndt said – it could be the vertical barrier screens, it could be something else. Ruff said there is a proposal to release PIT-tagged fish into the gatewell at John Day, to get information on gatewell residence time as well as fish condition from the gatewell down to the monitoring facility.

D. Dissolved Gas Team (DGT). DGT co-chair Mark Schneider updated the IT on the DGT's efforts to develop a comprehensive dissolved gas management plan. He explained that, at its most recent meeting, the Council had asked CBFWA to develop a dissolved gas research plan. Of course, the DGT has also been working on a dissolved gas research plan, at the IT's request, for some time, Schneider said. To avoid confusion, the DGT and CBFWA have been working together to ensure that, when all is said and done, a single dissolved gas research plan is

developed. He explained that the CBFWA effort is focused on the near term, while the focus of the DGT's research planning is the long term.

Schneider distributed a schedule for both the CBFWA and DGT dissolved gas research planning efforts; this document is attached as Enclosure D. Schneider noted that May 27 is the date when the dissolved gas research plan is scheduled to be delivered to the IT; the plan will be discussed at the IT's June 4 meeting, and the final plan will be delivered to the Council on June 15.

Schneider added that, at its last meeting, the DGT had reviewed a number of potential, future research needs in the context of the following question:

“Is there evidence that not addressing this research concept poses a significant and unacceptable risk to protecting and restoring the fish runs of the Columbia River Basin?”

If the answer to that question was no, then the proposed research, however worthy or interesting, was placed in a list of dissolved gas research concepts requiring further development, Schneider said. If the answer was yes, it was placed on a list of dissolved gas research concepts supported by the DGT. Those lists, as developed at the last DGT meeting, include the following:

#### Dissolved Gas Research Concepts Supported by the DGT:

1. Total dissolved gas supersaturation in project tailwaters and other areas of high gas.
2. Adult monitoring.
3. Physical injury (occurrence and implications) from prototypes of gas abatement structures and operations.

#### Dissolved Gas Concepts Requiring Further Development.

1. Vertical and horizontal distribution of fish.
2. Determine if a monitoring program for fry and larval life stages is necessary.
3. Sublethal effects of dissolved gas on increased mortality.
4. Time to mortality from static dissolved gas exposure.
5. Physiological consequences of exposure to total dissolved gas supersaturation under dynamic conditions.

The DGT is meeting today, Schneider continued; frankly, we're having some difficulty, given the short time-frame, in trying to resolve some of the scientific and policy issues inherent in this process. What happens if the DGT is unable to resolve some of those issues? Boyce asked. My hope is that we can describe the pros and cons of each issue, then ask the ISAB for their view, Schneider replied.

The other thing I wanted to mention is the recent conference in British Columbia, focused on ecosystem management planning in the Columbia Basin, said Schneider. At that meeting, we had an impromptu discussion among various people interested in dissolved gas abatement, both American and Canadian. It was agreed that we will form a trans-boundary group to share information on water quality issues; I view this as a real opportunity to begin a collaborative process with the Canadian interests that we really haven't had in the past, Schneider said. He added that 60 people had participated in the first dissolved gas discussion at the conference; clearly, he said, there is a great deal of interest in this subject on both sides of the border.

The discussion returned to the dissolved gas research planning effort, specifically, what it will be possible for the DGT to include in its plan and how useful it will be, in the context of the Council's information needs. I assume the Council would like to see something that will provide a framework for the work that is being funded under the Council's Fish and Wildlife Program, said Fred Olney. That's correct, added Ruff – what research questions need to be addressed and, specifically, what research projects are going to address those questions. I think it may be unrealistic to expect this group to provide clear guidance on June 4, said Arndt.

In response to a question from Boyce, Ruff said the reason this plan needs to be delivered by June 15 is to inform the Council's FY'99 prioritization process. I think we're going to be hamstrung, in terms of providing legitimate guidance, until we have a basinwide plan of study that gets at how we're going to move ahead with addressing this issue, said Arndt – I think that, to a large extent, that will drive the research questions and issues. I don't think we, the Council or the ISAB can be expected to give the kind of guidance the DGT needs, given the uncertainties that currently exist, Arndt said.

Brown summarized the outcome of this item by saying that, in terms of what the group is looking for from the DGT, the IT would like to see something, completed on the schedule in Enclosure D, that lays out the various issues in a way that allows the IT to come to grips with them at its June 4 meeting. Second, he said, we need to discuss what will happen to the plan between its delivery to the IT and, presumably, to CBFWA, on May 27. If you can work with John Palensky on how best to coordinate the IT and CBFWA reviews, as well as the best way to structure the discussion for the IT's June 4 agenda, I think that would be helpful, Brown said.

E. System Configuration Team (SCT). SCT co-chair Bill Hevlin distributed Enclosure E, a draft letter to the prospective members of the steering committee for a systemwide approach to dissolved gas management, referenced by Mark Schneider in the previous agenda item. Personally, Hevlin said, I think the discussions at the Castlegar workshop could be the starting-point for a very important – and heretofore missing – piece of our efforts here: a steering committee that brings all of the major stakeholders in the basin, including Canada, together, to start designing what needs to be accomplished in order to develop a true systemwide dissolved gas management plan. This letter describes our vision of how this effort might proceed, Hevlin explained.

He spent a few minutes going through Enclosure E; essentially, the steering committee would be tasked with developing a work plan to answer such basic questions as what needs to be done, who's going to do the work, how long it will take and how much it will cost. This work plan would then be delivered to the IT as a recommendation for funding. The first meeting of the steering committee has tentatively been scheduled for early June in Spokane, Hevlin said.

Arndt inquired as to the timeline for the delivery of a draft study plan to the IT; Ruff replied that it would be helpful if the IT could provide some guidance as to the schedule it would like to see for this effort. After some minutes of discussion, it was agreed that the fall – preferably September – is probably the most realistic (though still optimistic) time-frame for the delivery of a draft study plan to the IT.

I think, in simplistic terms, that one of the most important ideas behind this effort has to do with the fact that the Bureau is looking at some very costly gas abatement measures at Grand Coulee,

just as the Corps is doing at other projects in the basin, Hevlin said. It may be possible, by getting those upstream interested in some less-costly fixes, to save everyone money while doing a lot more for gas abatement. He added that any comments on the draft letter (Enclosure E) should be submitted to him or to Mary Lou Soscia as soon as possible.

Moving on, Arndt said the IT had discussed the coffer cell construction work at Ice Harbor Dam at its March meeting; the default decision, at that time, was to move forward with the contract for that work, he said. I said at that time that I would provide an update at the IT's May meeting, because our intent was to award that contract in mid-May, Arndt said. We are in fact moving ahead with that contract, he said; there has been a slight delay because of the general unavailability of sheet metal in the U.S., and the Corps has had to seek a special waiver to buy the metal needed for this project in Belgium. The contract is now scheduled to be awarded in June, Arndt said; we are moving forward with construction of the coffer cells, end-bay flow deflectors and training wall extension at Ice Harbor.

F. Decision Process Coordinating Group (DPCG). DPCG coordinator Ed Sheets said that, at its most recent meeting, the group spent considerable time discussing the current PATH work plan and schedule; we think we now have a schedule that will keep things moving so that the timeline we've been discussing this morning doesn't slip, he said. We also spent quite a bit of time talking about how PATH's biological modeling will fit in with the economic work underway in the Drawdown Regional Economic Workgroup, Sheets said. That, too, appears to be in pretty good shape; it appears that PATH will be able to provide at least preliminary information in the time-frame in which DREW needs that information.

Another lively discussion at our most recent meeting had to do with what alternatives are under investigation, Sheets continued. PATH has completed its preliminary analysis of the base case (Alternative A1); expanded barging (Alternative A2) and drawdown of the four Lower Snake Dams (Alternative A3) for spring/summer chinook. For fall chinook modeling, PATH will be looking at Alternatives A1, A2 and A3, as well as Alternative B1, drawdown of the four Lower Snake projects plus John Day, Sheets said. Their intent is to complete that work by June. PATH is also wrestling with how Alternative A6 – what we're calling the in-river option – fits in with their other priorities for analysis, he said. I think when we left that, we were still trying to figure out whether PATH will be able to fit that analysis into their schedule; if they can't, they'll inform us, and we'll inform IT, Sheets said.

Perhaps the most interesting discussion, he continued, centered on flow augmentation in the Snake River. To summarize where we left this issue, I think there was consensus, within DPCG, that PATH will complete its preliminary analysis of at least A1, A2, A3 and B1; they will then look at the preliminary results for spring/summer and fall chinook, to see whether there are some alternatives that are close to meeting the survival and recovery standards, but don't quite make it, Sheets said. For those alternatives, PATH will then look at the alternative of an additional 1 MAF out of the Snake to see whether that incremental addition would be enough to allow a given alternative to meet the survival and recovery standards.

Additionally, he continued, at the request of the State of Idaho, it was agreed that, if PATH is going to look at any option that includes more than 427 KAF of flow augmentation out of the Snake, that they will also look at the same alternative with zero flow augmentation. In other words, Idaho is very interested in understanding the incremental differences that these

different flow strategies might provide, he explained. There was some discussion of whether this “zero flow augmentation” option refers only to Snake River flow augmentation or to Columbia River flow augmentation as well, also, whether or not it truly means zero flow augmentation from the Snake, or no flow augmentation above the usual 427 KAF. Jim Yost said Idaho’s desire is that the “zero augmentation” option include no additional water from Idaho -- from Dworshak, the Upper Snake or Brownlee reservoir. Michael Newsom of Reclamation said that, from a modeling perspective, if the point is to address the concerns of irrigators in the Upper Snake, it probably makes more sense to leave the Dworshak operation unchanged and remove only the 427 KAF from the equation. That works for me, said Yost.

Newsom added that a technical group has been meeting to discuss what, precisely, should be modeled in the enhanced flow augmentation alternative. The first meeting was organizational, to lay out what we’re going to look at; we have subsequently explored how much augmentation would be required from both the Snake and Columbia systems to meet the flow targets on an average year basis and how this alternative might affect Columbia River operations both north and south of the border, Newsom said. We then asked the salmon managers to come back with a proposal for how they would prefer to shape flow augmentation in both the spring and summer periods, and to address the issue of meeting spring flow targets vs. refill for summer flow augmentation, he continued. We discussed their proposal at our last meeting; based on what they had given us, the conclusion was that we still didn’t know how to model it, and we’re continuing to discuss that problem. The bottom line is, it looks like things could come together in time to meet our June deadline, Newsom said. We also need to be sure that we have the necessary hydroregulation for whatever the “zero flow augmentation” option involves, Sheets added.

Is DREW also looking at the zero-augmentation option? Palensky asked. I’m not sure, Sheets replied – I’ve made a note to check that. They have a lot of incremental pieces, so it should be possible for DREW to just subtract out those costs and those effects.

Before we leave the alternatives discussion, Sheets continued, I would be remiss if I didn’t point out that PATH is a little overloaded at present, and struggling to stay on schedule. In short, they could use some guidance from the IT, in particular on the question of where Alternative A6, (the “maximum in-river” option under which the dams would be left in place with surface collectors or whatever is deemed the best available technology, and the fish are left to migrate in-river) fits into the list of PATH priorities. In the IT’s view, is A6 a high priority, or should PATH wait to see how the other alternatives come out? Sheets asked. No opinions being offered at today’s meeting, Sheets said that if anyone has a strong feeling one way or another, that they should call him directly. In general, he continued, PATH is working about as hard as it can at the moment, and anything that can be designated a lower priority helps. We’ve talked about the difficulties inherent in modeling the additional flow augmentation scenarios, said Brown – are there similar problems with the definition of what the in-river option should look like? I think that, if the IT decided that A6 should be a high priority, said Sheets, what PATH would probably suggest as an approach is, since we don’t have a lot of empirical information about surface collectors, that we do a run that assumes the most optimistic credible estimates, to see whether if, using the most optimistic numbers, Alternative A6 would come close to meeting the survival and recovery goals. If it did, then PATH could spend some more time trying to refine those estimates, Sheets said -- that would be the most time-efficient way to approach this. There are some who believe

that Alternative A6 is very unlikely to achieve the kind of results necessary to reach the survival and recovery standards, he continued. However, if people in the region feel A6 should be a priority for analysis, this is one way to do it without a lot of extra work for PATH. Sheets added that, while it will be relatively simple to model the best-case scenario for this alternative, it will be much more difficult to develop realistic assumptions of surface collector performance, given the absence of empirical data, if the best-case model run yields positive results and it is necessary to take the next analytical step.

The discussion returned to the relative priority Alternative A6 should assume in the PATH analytical hierarchy. Personally, I think it's an interesting option, said Ruff. BPA's Dan Daley raised the concern that modeling this alternative using only the most optimistic assumptions could create unrealistic expectations for the public. I'm not saying PATH shouldn't run this option, he said – however, I think that, if it does come close to the survival and recovery standards during the initial modeling run, I think PATH needs to commit to fine-tuning that analysis, using something less than the most-optimistic assumptions.

It sounds like there is some interest in this option, said Sheets. With that in mind, I will report back to PATH that the IT would like to see Alternative A6 analyzed, using the simple methodology I described, if that is at all feasible under the current PATH workload. Dave Marmorek mentioned earlier that he would like to have a further discussion of PATH schedule and priorities at the next IT meeting, said Brown; maybe we could ask him to talk about what the schedule might look like with and without A6 at that time.

One other quick item, Sheets said – at its most recent meeting, the Executive Committee approved distribution of the DPCG decision process recommendations paper; Mike Field wanted to explore distribution of that paper jointly with the Power Planning Council, and we haven't quite worked out all of the details that will allow that to happen. The intention is to distribute that paper soon, using the IT and DPCG distribution lists, and also to offer direct consultations with interested parties. Sheets asked whether there are other mailing lists to which the IT thinks the paper should be sent, or whether there are particular groups that need to be approached with an offer of direct consultation. The basic goal is to ensure that everyone who has an interest in the decision process has an opportunity to review the general work plan and process we're proposing, in particular, to ensure that all of the informational components the region feels are critical to the 1999 decision are in the pipeline, he said. Sheets asked that any suggestions the IT may have about the dissemination of the DPCG recommendations be submitted directly to him.

### III. TMT Call Participation and Follow-Up on Status of the Data Access Issue.

Since our last meeting, said Brown, we have received the reply on this issue that the Corps was working on at that time; as you'll recall, the issue was full access to the Corps' weekly model runs. A secondary issue was who is participating on the TMT's conference calls, and whether that participation is, in all cases, appropriate, Brown said – there was some concern about the effects of this access to information on power marketing. Apparently the latter concern has dissipated to some extent; no one has come forward to say they really want to pursue that issue.

Brown distributed Enclosure F, a packet containing the Corps of Engineers response to the

discussion of the data access issue at the last IT meeting, and to earlier correspondence from NMFS; it also includes copies of the responses from Douglas County PUD, Grant County PUD, B.C. Hydro and West Kootenai Power & Light to the question of whether or not they are willing to have their information shared through the Regional Forum process.

What it says, in effect, is that the forecast information for all projects – federal and non-federal alike – will be provided to NMFS, said Brown; for the federal projects only, that forecast information will be provided to NMFS and the other salmon managers. The letter also says that, in the Corps' view, the full forecast information that is provided to NMFS should not be shared with anyone outside NMFS, Brown said. As you will recall from our discussions last month, that is problematic from the standpoint of the utility of this information in the in-season management process – it is difficult for the other salmon managers to participate effectively if they do not have the same access to all of the information that the federal agencies do.

NMFS is in the process of reviewing the Corps response, Brown continued. To summarize, there are three points NMFS is considering in reply. First, access to this information is still a problem, because NMFS continues to see a need to distribute this data to other participants in the in-season management process. We will continue to work with the Corps to address this problem, while respecting the concerns expressed for possible misuse of this information.

Second, said Brown, regarding the Corps' production of two weekly model runs for use at TMT, the Friday and Monday runs do not seem to be a very workable solution to the original concern about timely access to data. NMFS' perception is that, by the time the Wednesday TMT meeting rolls around, the Friday runs are pretty worthless – the changes between the Friday and Monday runs are significant enough that it is difficult to provide intelligent input to the process, based on old information.

Finally, said Brown, there is a problem with the distribution of this information – there was some discussion at our last meeting about emailing things directly, and who is sending what to whom. The issue of where the Corps' responsibility stops and where NMFS' responsibility begins is still unclear, Brown said – to me, this all adds up to an issue that is still unresolved, and NMFS will continue to work on a response to the Corps' April 9 letter.

Nielsen said the federal SSARR information is now being emailed directly to the salmon managers. As a practical matter, he said, the Fish Passage Center serves as the technical advisor to the salmon managers; I think it would serve everyone's best interest, and cut down on a lot of email time, if the SSARRs could be sent directly to FPC. Is there a reason, from the Corps' standpoint, why that request can't be implemented? Brown asked. Practically speaking, it can be done, Arndt replied. However, it is the Corps' preference to send the information to the TMT membership only. The FPC works for the salmon managers; it is our preference that the salmon managers distribute this information as they see fit, Arndt said. In short, he said, we think the salmon managers need to be responsible for how, when and where it is used, not the Corps of Engineers.

On the issue of timeliness, and the relative uselessness of the Friday SSARR run to TMT participants on the following Wednesday, Arndt observed that, particularly in the spring period, flow forecasts are extremely mercurial – the fact of the matter is, a Monday SSARR run is generally more useful than a Friday run, a Tuesday run would be more useful yet and so on, he

said. That's just a fact of forecasting, Arndt said, simple meteorological reality, particularly during the spring. If you don't want the Friday runs because they no longer apply on Wednesday, that's fine. However, the other fact is, it is not realistic to expect the Corps to make the Monday run available within an hour of its completion – we've discussed that issue at length, and it just isn't something we can guarantee, Arndt said. I think we have to accept that there are certain time constraints imposed by the in-season management process that are difficult to overcome, he said.

We understand the constraints, said Boyce – the issue is simply when the salmon managers can get the most up-to-date possible information in their hands in order to produce system operational requests, in a timely manner, for presentation at the Wednesday TMT meeting. We have indicated that we will get the Monday SSARR run data to you as early as we possibly can, and we are committed to doing that, Arndt said. Returning to the question of access to non-federal project information, Jim Nielsen observed that the non-federal data included in the SSARR is actually the Corps' best guess about what those projects might do – it is not actual planned operational information provided by the non-federal operators. This being the case, Brown said, that raises an interesting legal question – how can this be considered proprietary information? The information contained in the SSARR is the Corps' model run of what we think all of the projects are going to do, Arndt agreed. Given that, why are we still wrapped around the axle on this issue? Brown asked. NMFS has access to the same data through the NOAA River Forecast Center, Arndt replied – you can get it directly, and you don't need to rely on the Corps. If there really is a need for the salmon managers to have this information, Arndt said, I think it would be best and most efficient for NMFS to get the data from the NOAA River Forecast Center and share it as they see fit. Because frankly, given the current climate in the region, the Corps is not comfortable in distributing this private operator information, said Arndt.

After some minutes of further discussion, Brown said that the ultimate solution to this issue will probably be that NMFS will distribute the non-federal project information to the salmon managers. If that means the Corps is going to stop sending us this information, he said, so be it. We're not doing that yet because your letter explicitly said you will provide the information to us on the condition that it not be distributed beyond NMFS, Brown said. However, I think this is probably where we will end up, and NMFS will inform the Corps before we begin to distribute this information.

#### IV. Discussion of Grand Coulee Operations.

Brown distributed Enclosure G, the notes from the April 23 IT conference call on the issue of exceeding summer draft limits. At that call, he said, we discussed the status of storage reservoir operations relative to the April 20 target for being at upper rule curve; the call was in response to the issue, raised at a previous TMT meeting, of whether there should be offsetting measures for those projects that were not at their April 20 upper rule curve elevation. At the call, we went through the FCRPS reservoirs project-by-project to see where each project was on April 20, Brown said; this information is summarized in (Enclosure G).

The next thing we discussed was whether the fact that some of those reservoirs did not reach their April 20 flood control elevation was a function of discretionary operations, which should result in some additional, offsetting measures, Brown continued. The projects that missed their

April 20 flood control elevations were Grand Coulee, Hungry Horse and Dworshak; Libby doesn't really have an April 20 upper rule curve elevation, but was below its March 31 rule curve elevation, said Brown. At both Libby and Hungry Horse, the reason for the miss was a changing forecast, he said. Dworshak missed its April 20 elevation because it was held at an abnormally-low elevation through December for grouting work, Brown added; it has been on minimum outflow since then. Grand Coulee missed its April 20 elevation by 720 KAF due to the drum gate repair work this spring.

In summary, at least at last week's conference call, it was agreed that, with the exception of the Grand Coulee miss, the differences at the other projects were a function of a changing forecast that resulted in a change in their April 20 flood control elevations after the projects had already been drafted to meet an earlier flood control target, said Brown. For this reason, it was agreed that Grand Coulee is the only project for which it might be appropriate to discuss possible offsetting measures.

Two specific offsetting measures were discussed during the conference call, said Brown. The first was the possibility of a deeper draft at Grand Coulee; the second included a deeper draft at that project, with some of that deeper draft offset by releases of additional non-treaty storage water. The bottom line is that neither of those operations has been committed to by either Bonneville, in the case of the latter option, or the Bureau of Reclamation, in the case of the former, said Brown.

In both cases, the intent of the offsetting measures would be to compensate for the fact that the drum gate repair work at Grand Coulee has resulted in lower flows during the spring migration period, Brown continued. Specifically, we discussed the possibility of changing Grand Coulee's August 31 elevation from 1280 feet to 1277 feet; in order to make more water available for spring migrants, we also discussed the possibility of changing Grand Coulee's June 30 target elevation from full to full minus three feet, he said. That would make an additional 220 KAF available during the spring period, without impacting flows during the summer period.

During the conference call, the Bureau said they had begun to discuss these options with Lake Roosevelt-area residents and water users, but that they had not yet completed those consultations, and were not yet able to commit to this operation, Brown said. I still don't have a proposal from Reclamation as to how to operate Grand Coulee through the end of the season, said Jim Fodrea; it basically amounts to a classic upriver/downriver tradeoff. I can tell you that no one up there is in support of a deeper drawdown of Grand Coulee at this time, he said. In the absence of a specific proposal from Reclamation at this time, and with no additional sources of water to make up for the 720 KAF shortfall this spring that I'm aware of, my proposal would be to ask the fish and wildlife community to get together and come up with a recommendation that we could implement if consensus can be reached, Fodrea said. I would like to offer this opportunity to the fish managers, Fodrea said, because quite frankly, Reclamation doesn't have a proposal to offer.

Keith Underwood of the Spokane Tribes observed that the reason we're in this position is that Reclamation made a mistake in how it operated Lake Roosevelt; they assumed that the 1998 water supply would be adequate to allow them to accomplish all of the drum gate repair work this spring and still meet the April 20 upper rule curve elevation. What we're talking about, in these mitigation alternatives, is trading off the biology in Lake Roosevelt for the biology

downstream. Personally, Underwood said, I don't think that's an appropriate tradeoff, given the fact that other options, such as additional non-treaty storage, may be available. Granted, they may be very costly options, but that may be the cost of doing business under this scenario.

Regarding Fodrea's proposal that the salmon managers develop a recommendation for a way to offset the shortfall at Grand Coulee, Boyce observed that it isn't reasonable to expect the salmon managers to identify where the pain will strike home – in my view, he said, we didn't create this problem, yet I don't see much willingness, on the part of the project operators, to come forward with any viable option to mitigate for the impacts of the drum gate repair work. It should not be the salmon managers' responsibility to identify sources of water to mitigate for this situation, he said.

The group discussed various possible offsetting operational options, including the possibility of additional non-treaty storage water without a deeper Grand Coulee draft. After some minutes of further discussion, Nielsen said the salmon managers will discuss this issue at next Tuesday's FPAC call, and will attempt to reach consensus on a recommended alternative to offset for the Grand Coulee shortfall.

#### V. Status of 1998 Supplemental Biological Opinion.

Briefly, said Brown, the 1998 supplemental BiOp is not done yet. The remaining changes that need to be made are small; changes that have been made in response to comments received to date include the fact that the June 30 storage project refill date has been changed from a hard constraint to a preference. In short, I don't think anyone will be surprised at what is in the final document, Brown said; we're mostly working to fine-tune the language at this point.

#### VI. Regional Forum Facilitation Selection.

Brown said a meeting has been set for next week between Donna Silverberg and the various Regional Forum committee chairs; as you will recall, the default position was that all Regional Forum meetings will be facilitated, and that the IT will be the forum for deciding if facilitation is unnecessary for a given group or meeting, he said. Silverberg said that actual facilitation of the Regional Forum meetings will begin as soon as possible, hopefully within two weeks; she added that she is looking forward to working with everyone involved in this process.

#### VII. Approval of Minutes from April 2 IT Meeting.

No comments were provided on the minutes at today's meeting.

#### VIII. Next IT Meeting Date and Agenda Items.

The next Implementation Team meeting was set for 9 a.m. Thursday, June 4, at NMFS' Portland offices. With that, the meeting was adjourned. Meeting notes prepared by Jeff Kuechle, BPA contractor.